PCT/US00/04733

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#### From the INTERNATIONAL BUREAU

#### **PCT**

#### **NOTIFICATION OF ELECTION**

(PCT Rule 61.2)

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24

Arlington, VA 22202 ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year) 11 December 2000 (11.12.00)	in its capacity as elected Office
International application No. PCT/US00/04733	Applicant's or agent's file reference PC10433A
International filing date (day/month/year) 25 February 2000 (25.02.00)	Priority date (day/month/year) 26 February 1999 (26.02.99)
Applicant	
CONKLE, Harold, N. et al	

1.	The designated Office is hereby notified of its election made:
	X in the demand filed with the International Preliminary Examining Authority on:
	21 September 2000 (21.09.00)
	in a notice effecting later election filed with the International Bureau on:
2.	The election X was
	was not
	made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

C. Cupello

Telephone No.: (41-22) 338.83.38

Facsimile No.: (41-22) 740.14.35

Form PCT/ISA/206 (July 1992)

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 2-6 and partially claims 1 and 18-20

Method for the purification and recovery of encysted protozoa by a salt flotation process.

2. Claims: 7-14 and partially claims 1, 18, 19, and 21-27

Method for the purification and recovery of encysted protozoa by a gas flotation process.

3. Claims: 15-17 and partially claims 18-27

Method for the sporulation of oocysts.

According to Art. 3(4)(iii) and Rule 13 PCT an application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept, i.e., having at least one common technical feature defining a contribution over the prior art.

The original common concept which might have linked the above mentioned inventions is "a method concerning oocysts". This common concept is however not novel with regard to prior art:

US4544548, for instance, discloses a method for the purification and recovery of oocysts by a salt flotation process (see col. 7, 1. 15-33).

Since no other technical feature can be distinguished which might link the subject-matter of said claims, each of the above mentioned groups of claims represents an independent invention.

N.B.: The use of the term "invention" here in no way implies recognition of an inventive step for the subject-matter of any group of claims.

#### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 206

Continuation of Box 3.

Claims Nos.: 18-27 (all partially)

Claims 15-17 are directed to a method for the sporulation of oocysts. Claim 18 is referring to such a method. Consequently, claim 18 has been searched as if it were referring to claim 15 (method for the sporulation of oocysts) instead of claim 14 (method for the purification and recovery of encysted protozoa).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is preliminary examination of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

#### n PCT/ISA/206 Annex to COMMUNICATION RELATING TO THE RESULTS L INTERNATIONAL SEARCH OF THE PAR

International Application No CT/US 00/04733

1. The present communication is an Annex to the invitation to pay additional fees (Form PCT/ISA/206). It shows the results of the international search established on the parts of the international application which relate to the invention

see 'Invitation to pay additional fees'
2. This communication is not the international search report which will be established according to Article 18 and Rule 43.

3. If the applicant does not pay any additional search fees, the information appearing in this communication will be considered as the result of the international search and will be included as such in the international search report.

4.If the applicant pays additional fees, the international search report will contain both the information appearing in this communication and the results of the international search on other parts of the international application for which such fees will have been paid.

. DOCUME	NTS CONSIDERED TO BE RELEVANT	Relevant to claim No.
ategory °	Citation of document, with indication, where appropriate, of the relevant passages	
Χ	US 4 544 548 A (DAVIS PAUL J ET AL) 1 October 1985 (1985-10-01)	1
_	column 7, line 19 the whole document	2-6,
A	the whore documents	18-20
X	US 4 863 731 A (DAVIS PAUL J ET AL) 5 September 1989 (1989-09-05)	1
	column 7. line 26-45	2-6,
Α	the whole document	18-20
A	RYLEY J F ET AL: "METHODS IN COCCIDIOSIS RESEARCH SEPARATION OF OOCYSTS FROM FECES" PARASITOLOGY,	1-6, 18-20
	vol. 73, no. 3, 19/6, pages 311-320, XP000909784 ISSN: 0031-1820	
	the whole document	
A	US 3 827 557 A (FISCHER E) 6 August 1974 (1974-08-06)	
	claim 4	
1		·

$\sqcap$	Further documents are listed in the continuation of the
ш	

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- document referring to an oral disclosure, use, exhibition or other means
- document published prior to the international filing date but later than the priority date claimed
- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled
- \*&\* document member of the same patent family

Special categories of cited documents:

#### Pi t Family Ann x

Information on patent family members

International Application No
PCT/US 00/04733

Patent document cited in search report		Publication date		ent family mber(s)	Publication date
US 4544548	I	01-10-1985	CA DE ES FR GB NL US US	1114292 A 2849226 A 475076 A 2408351 A 2008404 A,B 7811230 A,B, 4863731 A 4552759 A 4752475 A	15-12-1981 17-05-1979 01-12-1979 08-06-1979 06-06-1979 16-05-1979 05-09-1989 12-11-1985 21-06-1988
US 4863731		05-09-1989	CA DE ES FR GB NL US US	1114292 A 2849226 A 475076 A 2408351 A 2008404 A,B 7811230 A,B, 4544548 A 4552759 A 4752475 A	15-12-1981 17-05-1979 01-12-1979 08-06-1979 06-06-1979 16-05-1979 01-10-1985 12-11-1985
US 3827557	 A	06-08-1974	NONE		

	Taxional Chapter - U09 / 701760
U. S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTORNEY'S DOCKET NUMBER
TRANSMITTAL DEATER TO THE UNITED STATES	PC10433A
PATENT AND TRADEMARK OFFICE	U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5)
DESIGNATED/ELECTED OFFICE (DO/EO/US)	tiled herewith via EXPRESS MAIL LABEL
CONCERNING A FILING UNDER 35 U.S.C. 371	PRIORITY DATE CLAIMED
TERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE	February 26, 1999
T'US00/04733 February 25, 2000	
TLE OF INVENTION ETHOD FOR THE PURIFICATION, RECOVERY, AND SPORULATION OF CYS	TS AND OOCYSTS
P. CCHILLTZ, Scott I RI ONIGEN: Fred H. WEBER, U	avid R. KILANOWSKI; Bruce MONZYK; Timothy
arold N. CONKLE; Joseph E. SCHULTZ, Scott J. BEGINTALE; and Ted L. TEWKSBL. WERNER: Chad M. CUCKSEY; Hamish A.I. McARTHUR; and Ted L. TEWKSBL pplicant herewith submits to the United States Designated/Elected Office (DO/EO/US)	JRY  the following items and other information:
pplicant herewith submits to the United States Designated Diected States	•
1.   This is the FIRST submission of items concerning a filing under 35 U.S.C. 3	of 1.
cuperOHENT cubmission of items concerning a	filling under 33 O.S.C. 371.
This express request to begin national examination procedures (35 U.S.C. 37	371(b) and PCT Articles 22 and 39(1).
examination until the expiration of the applicable time limit set in 35 oldes.  4.   A proper Demand for International Preliminary Examination was made by the	ne 19th month from the earliest claimed priority date.
<ul> <li>A proper Demand for International Preliminary Examination</li> <li>A copy of the International Application as filed (35 U.S.C. 371(c)(2))</li> </ul>	·
—	by the International Bureau).
— the area recognitived by the International Bureau.	
is not required, as the application was filed in the United	States Receiving Office (RO/US).
- Live Stan International Application into English (35 U.S.C. 371(c)	0(2)).
and the state of the International Application under PCT Artic	tie 19 (33 U.S.C. 37 (C)(3))
transmitted herewith (required only if not transmitted	by the International Bureau).
the second transmitted by the International Bureau.	
have not been made; however, the time limit for making	such amendments has NOT expired.
have not been made and will not be made.	•
A sweet wine of the amendments to the claims under PCT Article 19 (35 U.)	S.C. 371(c)(3)).
in Unexe	cuted Form Only
<ol> <li>A ranslation of the annexes to the International Preliminary Examination R</li> </ol>	Report under PCT Article 36
(35  LLS C  371(c)(5)).	•
Items 11. To 16. Below concern other documents(s) or information included:	Farm A 820/1449: copies of 8 references.
Items 11. To 16. Below concern other documents(3) of information Disclosure Statement under 37 C.F.R. 1.97 and 1.98 with	FORM AZZO E.B. 2.28 and 3.31 is included.
11. An Information Disclosure Statement and	ance with 37 C.P.R. 3.28 and 3.51 is metados.
13. A FIRST preliminary amendment.	
A SECOND or SUBSEQUENT preliminary amendment.	•
— A disconsideration	
- Conver of attorney and/or address letter.	
— O I in the second formation:	
16. Other items or information:	
Copy of International Search Report	
Copy of Invitation to Pay Additional Fees for Multiple Inventions	•
Applicants "Response to Pay Additional Fees" for Multiple Inventions	÷.
Certificate of Mailing via Express Mail EE 645346652 US	
Return Receipt Postcard	

## PATENT COOPERATION TREATY

09701760

### **PCT**

#### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

pplicant's or agent's file reference	FOR FURTHER see Notification of (Form PCT/ISA/2)	f Transmittal of International Search Report 20) as well as, where applicable, item 5 below.
830-867-228 ternational application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/US 00/ 04733 25/02/2000 26/02/1999		26/02/1999
01/ 03 00/ 04/33		
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FIZER, INC. et al.		
according to Article 18. A copy is being	een prepared by this International Searching Aut transmitted to the International Bureau. sts of a total of sheets. by a copy of each prior art document cited in this	
language in which it was med,	he international search was carried out on the ba unless otherwise indicated under this item.	
the international search	h was carried out on the basis of a translation of	the international application furnished to this
b. With regard to any nucleotide was carried out on the basis o	and/or amino acid sequence disclosed in the	international application, the international search
contained in the interr	national application in written form.	
filed together with the	international application in computer readable fo	rm.
furnished subsequent	ly to this Authority in written form.	•
	the thin Authority in computer readble form.	in a second
the statement that the	subsequently furnished written sequence listing	does not go beyond the disclosure in the
the statement that the furnished	e information recorded in computer readable form	n is identical to the written, sequence listing has been
2. Certain claims were	found unsearchable (See Box I).	
	s lacking (see Box II).	
4. With regard to the title,		
X the text is approved a	as submitted by the applicant.	
the text has been est	tablished by this Authority to read as follows:	
5. With regard to the abstract,	and the second	
the text is approved the text has been es	as submitted by the applicant. stablished, according to Rule 38.2(b), by this Auth om the date of mailing of this international search	nority as it appears in Box III. The applicant may, report, submit comments to this Authority.
	e published with the abstract is Figure No.	1
		None of the figures.
as suggested by the		<del></del>
because the applica	ant failed to suggest a figure.	
because this figure	better characterizes the invention.	



	(O entirection of item 1 of first sheet)
	re found unsearchable (Continuation of item 1 of first sheet)
This International Search Report has not been establish	ed in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.:     because they relate to subject matter not requi	ired to be searched by this Authority, namely:
2. X Claims Nos.: 18-27 (all p because they relate to parts of the Internation an extent that no meaningful International Sea see FURTHER INFORMATION she	al Application that do not comply with the process arch can be carried out, specifically:
	not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II Observations where unity of inventio	on is lacking (Continuation of item 2 of first sheet)
This International Searching Authority found multiple i	
see additional sheet	
As all required additional search fees were searchable claims.	timely paid by the applicant, this International Search Report covers all
As all searchable claims could be searched of any additional fee.	d without effort justifying an additional fee, this Authority did not invite payment
As only some of the required additional seconds covers only those claims for which fees we	arch fees were timely paid by the applicant, this International Search Report ere paid, specifically claims Nos.:
No required additional search fees were ti restricted to the invention first mentioned in	imely paid by the applicant. Consequently, this International Search Report is in the claims; it is covered by claims Nos.:
Remark on Protest	The additional search fees were accompanied by the applicant's protest.  X No protest accompanied the payment of additional search fees.

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 2-6 and partially claims 1 and 18-20

Method for the purification and recovery of encysted protozoa by a salt flotation process.

2. Claims: 7-14 and partially claims 1, 18, 19, and 21-27

Method for the purification and recovery of encysted protozoa by a gas flotation process.

3. Claims: 15-17 and partially claims 18-27

Method for the sporulation of oocysts.

#### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 18-27 (all partially)

Claims 15-17 are directed to a method for the sporulation of oocysts. Claim 18 is referring to such a method. Consequently, claim 18 has been searched as if it were referring to claim 15 (method for the sporulation of oocysts) instead of claim 14 (method for the purification and recovery of encysted protozoa).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

### INTERNATIONAL SEARCH REPORT

International Application No CT/US 00/04733

C12N3/00 A. CLASSIFICATION OF SUBJECT IN THE TOTAL TOTAL

According to International Patent Classification (IPC) or to both national classification and IPC

Minimum documentation searched (classification system followed by classification symbols) IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ, BIOSIS, EMBASE, SCISEARCH, BIOTECHNOLOGY ABS, LIFESCIENCES, CHEM ABS Data

C. DOCUME	ENTS CONSIDERED TO BE RELEVANT	Relevant to claim No.
ategory °	Citation of document, with indication, where appropriate, of the relevant passages	
X	US 4 544 548 A (DAVIS PAUL J ET AL) 1 October 1985 (1985-10-01)	1
A	column 7, line 19 column 7, line 33-35	2-6, 15-20
X	US 4 863 731 A (DAVIS PAUL J ET AL) 5 September 1989 (1989-09-05)	1
Α	column 7, line 26-45 column 7, line 45-47	2-6, 15-20
	-/	
		bers are listed in annex.

Y Further documents are listed in the continuation of box C.	X Patent family members are listed in annex.
Special categories of cited documents:      A' document defining the general state of the art which is not considered to be of particular relevance      E' earlier document but published on or after the international filing date      L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)      O' document referring to an oral disclosure, use, exhibition or other means      P' document published prior to the international filing date but later than the priority date claimed  Date of the actual completion of the international search	<ul> <li>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>*&amp;* document member of the same patent family</li> <li>Date of mailing of the international search report</li> <li>2 8, 11, 00</li> </ul>
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL - 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer  Herrmann, K

### INTERNATIONAL SEARCH REPORT

International Application No ICT/US 00/04733

CT/US 00/04733		
C.(Continua Category °	ction) DOCUMENTS CONSIDERED TO BE RELEVANT  Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	RYLEY J F ET AL: "METHODS IN COCCIDIOSIS RESEARCH SEPARATION OF OOCYSTS FROM FECES" PARASITOLOGY, vol. 73, no. 3, 1976, pages 311-326, XP000909784 ISSN: 0031-1820 the whole document	1-6, 15-20
Α	US 5 068 104 A (BHOGAL BALBIR S ET AL) 26 November 1991 (1991-11-26) column 7, line 55,56	15–17
A	US 3 617 529 A (THOMPSON WILLIAM H ET AL) 2 November 1971 (1971-11-02) column 2, line 21	1,7-14, 21-27
A	SMITH P H ET AL: "FROTH FLOTATION FOR HARVESTING CHLORELLA ALGAE" NORTHWEST SCIENCE,US,PULLMAN, WA, vol. 42, no. 4, 1968, pages 165-171, XP002064294 ISSN: 0029-344X the whole document	1,7-14, 21-27

#### INTERNATIONAL SEARCH REPORT

letormation on patent family members

International Application No CT/US 00/04733

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4544548	A	01-10-1985	CA 1114292 A DE 2849226 A ES 475076 A FR 2408351 A GB 2008404 A,B NL 7811230 A,B, US 4863731 A US 4552759 A US 4752475 A	15-12-1981 17-05-1979 01-12-1979 08-06-1979 06-06-1979 16-05-1979 05-09-1989 12-11-1985 21-06-1988
US 4863731	Α	05-09-1989	CA 1114292 A DE 2849226 A ES 475076 A FR 2408351 A GB 2008404 A,B NL 7811230 A,B, US 4544548 A US 4552759 A US 4752475 A	15-12-1981 17-05-1979 01-12-1979 08-06-1979 06-06-1979 16-05-1979 01-10-1985 12-11-1985 21-06-1988
US 5068104	Α	26-11-1991	NONE	
US 3617529	Α	02-11-1971	NONE	